A.Plan Overview

1. Background

The Rio Salado is envisioned as a green belt of diverse plant and landscape areas that will provide recreational facilities that are accessible, attractive, enjoyable, and safe for public use. In 1994, the Rio Salado Land Use Plan was revised to identify the Rio Salado Overlay District, created by the historic flood plain in Tempe's portion of the Salt River. This Overlay District is recognized by the City Ordinance for increased development requirements such as landscaping and citizen review. In 1995 the Specific Area Plan was developed to identify development immediately surrounding the lake that would have increased development standards. In 1996 the Rio Salado Park was formally designated. This area is bounded by the Hohokam Freeway on the west, McClintock Drive on the east, Curry Road on the north, and Rio Salado Parkway on the south. The park is adjacent to private development, municipal facilities, the Town Lake, and extensive regional infrastructure. In 1997 the Enhanced Services District was formed to identify development contributing to the operations and maintenance fund of the Town Lake. This district potentially requires more frequent attention than other park areas due to increased traffic and events. The land area surrounding the Town Lake is closely linked to Downtown Tempe and Arizona State University, making maintenance, circulation and parking critical issues to the successful function of the project.

2. Purpose and Objectives

The purpose of this section is to outline maintenance standards for landscaping, lighting, restrooms and other park facilities and to outline a phased circulation and parking plan.

a) Objectives of Section II

a. Maintenance of plants, trees, and landscapes in the park shall, as a minimum, meet the same standards as in other city parks.

b. Habitat areas will preserve the natural environment as much as possible.

b) Objectives of Section III

Prepare a comprehensive transportation study and sub-area plan as part of the city-wide Transportation Plan addressing city-wide circulation issues including local traffic issues and linkages to Rio Salado and the downtown area. The plan should develop programs and solutions focusing on transportation demand management (for private developments), transit use, parking management, and use of all transportation modes.

B. Maintenance Standards

Background

Development of a standard maintenance classification system has been extremely difficult because there have been problems devising a system comprehensive enough to apply to the wide variety of park systems throughout the City of Tempe. In order to be of assistance setting up a standard approach at this level, the maintenance mode has thirteen elements of consideration. There may be additional segments within these elements to make up the total maintenance program. Mode is meant to mean "the way of" maintenance. Maintenance can vary because of labor rates, cost of materials, extent of landscape design, length of season, moisture availability, transportation cost, and intensity of public use. At higher maintenance levels it is assumed that the administering department will have adequate time, budget, and properly trained personnel to accomplish the quality that should accompany the quantity of work done.

Mode

State of the art maintenance applied to a high quality diverse landscape. Usually associated with high traffic areas such as governmental grounds or city parks.

1. **Turf Care -** Grass height maintained according to species and variety of grass. Mowed at least once every five working days but may be as often as once every three working days. Aeration as required, not less than four times per year. Reseeding or sodding as needed. Weed control should be practiced so that no more than ten percent of the surface has weeds present at any time.

2. **Fertilizer -** Adequate fertilization applied to plant species according to their optimum requirements. Application rates and times should ensure an even supply of nutrients for the entire year. Nitrogen, phosphorus, and potassium percentages should follow local recommendations from the County Extension Service. Trees, shrubs, and flowers should be fertilized according to their individual requirements of nutrients for optimum health and nutrition. Unusually long or short growing seasons may modify the chart slightly.

3. **Irrigation** - Sprinkler irrigated. Electric automatic sprinkler system commonly used. Some manual systems could be considered adequate under plentiful rainfall circumstances and adequate staffing. Frequency of use follows rainfall, temperature, seasonal length, and demands by plant metabolism/species. Inspection of irrigation systems to identify obvious problems affecting irrigation performance and efficiency.

4. **Litter Control** - Minimum of once per day, seven days per week. Extremely high visitation may increase the frequency. Receptacles should be plentiful enough to hold all trash generated between servicing without normally overflowing.

5. **Pruning** - Frequency dictated primarily by species and variety of trees and shrubs. Length of growing season and design concept also a controlling factor as are clipped hedges versus natural style. Timing usually is scheduled to coincide with low demand periods or to take advantage of special growing characteristics.

6. **Disease and Insect Control** - Control program may use any of three philosophies: 1) Preventative: a scheduled chemical or cultural program designed to prevent significant damage. 2) Corrective: application of chemical or mechanical controls designed to eliminate observed problems. 3) Integrated pest management: withholding any controls until such time as pests demonstrate damage to plant materials or become a demonstrated irritant in the case of flies, mosquitoes, gnats, etc. At this maintenance level, the objective is to control the problem prior to the public noticing. It is anticipated that problems will either be prevented or observed at a very early stage and corrected immediately.

7. **Lighting** - Maintenance should preserve the original design. Damaged systems should be repaired as quickly as they are discovered. Bulb replacement should be done during the first working day after the outage is reported.

8. **Surfaces** - Sweeping, cleaning, and washing of surfaces needs to be done so no accumulation of sand, dirt or leaves distract from the appearance or safety of the area. Repainting or restaining of structures should occur when weather or wear deteriorate the appearance of the covering. Stains to surfaces should be removed within five working days. Graffiti should be washed off or painted over the first working day after reported.

9. **Repairs** - Repairs to all elements of the design should be done immediately upon discovery provided replacement parts and technicians are available to

accomplish the job. When disruption to the public might be major and the repair not critical, repairs may be postponed to a less disruptive time period.

10. **Inspection** - Inspections should be done daily by a member of the staff.

11. **Floral Plantings** - May include ground level beds, planters or hanging baskets. Often multiple plantings are scheduled, usually at least two blooming cycles per year. Some designs may call for a more frequent rotation of bloom. Maximum care of watering, fertilizing, disease control, disbudding, and weeding is necessary. Weeding flowers and shrubs is done a minimum of once per week. The desired standard is essentially weed free.

12. **Restrooms** - Not always a part of the design but where required will normally receive no less than once per day servicing. Especially high traffic areas may require multiple servicing or a person assigned as attendant.

13. **Special Features** - Features such as fountains, drinking fountains, sculpture, speaker systems, structural art, flag poles or parking and crowd control devices may be part of the integral design. Maintenance requirements can vary drastically but it should be of the highest possible order.

Operation Calendar:

PARK MAINTENANCE - MODE (1)--(M) Number of times per month maintained.
A-Annual, M-Monthly, W-Weekly, D-Daily, AR-As Required

ASSIGNMENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1. PALM TREE TRIM/SKIN	A	A			A	A	A				A	A
2. DECIDUOUS TREE TRIMMING	A	A	A									
3. FERTILIZE TREES SHRUBS		A	A	A								
4. FERTILIZE TURF AREAS				A	M	M	M	M	M			
5. SWEEP/VAC TURF AREAS	M	M				M	M	M			M	M
6. TURF AERATION			M	M	M	M	M	M	M			
7. WINTER MOWING	2/M	2/M	2/M	2/M						2/M	2/M	2/M
8. SUMMER MOWING					W	W	W	W	W			
9. PAINT FACILITIES				A	A							
10. OVERSEED REC. AREAS										A		
11. TREE RE-PLACEMENT			A	A	A							
12. TREE TRIMMING EVERGREEN			A	A	A							
13. PAINT REC. EQUIPMENT				A	A	A						
14. OLEANDER TRIMMING			A	A	A					A		
15. POWER WASH AFTER EVENTS	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR

ASSIGNMENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
6. POWER WASH TABLES/ RAMADA	2/M	2/M	2/M	2/M	2/M	2/M	2/M	2/M	2/M	2/M	2/M	2/M
7. PLANT FLOWER BEDS		A	A	A	A					A	A	
8. HOLIDAY DUTIES	AR	AR			AR		AR		AR		AR	AR
9. PARK INSPECTIONS	D	D	D	D	D	D	D	D	D	D	D	D
10. FACILITIES REPAIRS/ SERVICE	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
11. ROSES FERT./PRUNE	A	A										
12. GRANITE PATH MAINT.	W	W	W	W	W	W	W	W	W	W	W	W
13. GRAFFITI REMOVAL	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
14. MAINT. DESERT LANDSCAPE	M	M	M	M	M	M	M	M	M	M	M	M
25.IRRIGATION OPERATIONS	D	D	D	D	D	D	D	D	D	D	D	D
26.VANDALISM REPAIRS	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
27. SEED BARE SPOTS TURF					A	A	A					
28. PESTICIDE APPLICATION	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
29. LAKE SKIMMING	D	D	D	D	D	D	D	D	D	D	D	D
30. HABITAT MAINTENANCE	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR

D. Specifications

1. General - Proper landscape maintenance sustains the quality and health of a landscaped area and preserves the intended design concept. In the City of Tempe, landscaping is intended to provide an overall aesthetically pleasing appearance for the community.

Plants are chosen for their natural shape and growth habit. All cultural practices should encourage and enhance the natural form of the plant material. Trimming and pruning should not alter this form appreciably.

The following is to serve as required specifications and to provide guidance in landscape maintenance areas.

2. Trees

a. Staking & Guying

i. The purpose of staking and guying trees is to support and protect young trees until they are able to stand alone.

ii. All tree stakes, guys, and ties shall be maintained to properly support the tree. Stakes, guys, and ties shall be inspected a minimum of once every 30 days to prevent girdling or chafing of trunks or branches or rubbing which may cause bark wounds.

b. Pruning

i. All trees shall be allowed to grow to their natural genetic form and size, unless circumstances dictated otherwise.

ii. All trees shall be pruned to promote structural strength and to accentuate the natural form and features of the tree.

iii. Pruning must be carried out to permit unobstructed passage for pedestrians and motor vehicles and to prevent sight restrictions. Branches should be maintained to 8-1/2 ft. above sidewalks and 15 ft. above vehicle pathways.

iv. Stripping of lower branches (“raising up”) of young trees shall not be permitted. Lower branches shall be retained in a “tipped back” or pinched condition with as much foliage as possible to promote caliper trunk growth. Lower branches should be cut off only after the tree is able to stand erect without staking artificial support.

v. Thinning of certain species and individual specimens may be required to prevent wind damage. All suckers, water sprouts, transversal and heavily laden branches shall be removed to provide less wind resistance.

vi. Palm trees shall be trimmed annually when the flower stalks have developed, but before flowering has occurred. Palms which are in a skinned condition shall be skinned annually and inspected for pests and diseases.

c. Spraying

i. Olive trees shall be sprayed twice during the bloom period with "Olive Stop" to reduce fruiting. Product will be applied at the recommended label rate.

d. Fertilization

i. Most trees shall be fertilized annually, in the spring, with a complete fertilizer. Fertilization of mature trees shall be required only if the trees show a definite need for fertilization.

ii. Fertilizer shall be applied around the tree, approximately halfway between the trunk and the drip line, at the rate of one-half pound of nitrogen per inch of trunk diameter measured at four feet above the soil surface.

iii. All trees shall be observed for signs of nutrient deficiencies and treated to correct deficiencies throughout the year.

3. Shrubs and Vines

a. Pruning

i. Shrubs and vines shall be pruned to maintain growth within space limitations, to maintain or enhance the natural growth habit, or to eliminate diseased or damaged growth. Some species shall be trimmed appropriately to influence flowering and fruiting, or to improve vigor.

ii. Shrubs and vines must be trimmed as needed to permit unobstructed passage for pedestrians, bicyclists and motor vehicles. Trimming shall be carried out according to the attached diagram in order to prevent sight restrictions.

iii. Shrubs shall be pruned to conform with the design concept of the landscape. Individual shrubs shall not be clipped into balled or boxed forms, except where specifically instructed.

iv. Vines shall be pruned to control growth and direction, and shall not be allowed to grow over windows, doors or other structural features. Vines shall not be allowed to grow over the crowns of shrubs or trees.

b. Fertilization

i. Most shrubs and vines should be fertilized annually. Plants that have reached maturity may not require annual fertilization.

ii. All actively growing plants, not yet at maturity, shall be fertilized yearly during the months of February through April. Apply an appropriate slow-release, long lasting nitrogen fertilizer, controlled release fertilizer, or plant tablets at the manufacturer's recommended application rate.

iii. All plants shall be observed for signs of nutrient deficiencies and treated to correct deficiencies throughout the year.

4. Ground Covers

a Trimming

i. Established ground covers bordering sidewalks shall be edged as often as necessary to prevent encroachment.

ii. Ground covers shall not be allowed to touch or cover the crowns of shrubs and trees.

iii. Some ground covers may require cutting back to remove woody growth and promote vigor.

b. Fertilization

Fertilization shall coincide with the growing season of each specific ground cover. One application of a complete fertilizer in the spring, per manufacturer's specified rate, is generally adequate for established ground covers.

5. Turf Areas (lawns)

a. Mowing

i. Lawns shall be mowed weekly during the growing season and twice per week during the winter months.

ii. The height of cutting shall be maintained consistently to prevent scalping or burn. The mowing height shall be 1-1/2 inches.

iii. Excessive grass clippings shall be collected and removed. Adjacent sidewalks and streets shall be swept or blown clean of clippings.

iv. Mowing patterns shall be alternated each week to avoid creating ruts and compaction.

b.Edging

i. All lawn edges along sidewalks and curbs shall be edged before each mowing during the active growing season (March through October) and as required for appearance for the remainder of the year.

ii. Edging shall be performed with a blade type mechanical edger. The cut edge should appear as a clean smooth line.

iii. A monofilament line trimmer shall be used to trim around obstacles within the lawn area. Care shall be taken to insure that the bark of trees and shrubs are not damaged or stripped by the line trimmer.

iv. Lawn sprinkler heads shall only be edged to allow for proper distribution of water.

c.Fertilization

i. April 1 to April 15: apply granular fertilizer 12-12-12 at a rate of 1 pound actual nitrogen per 1,000 square feet. This rate is 8.5 lbs. per 1,000 sq. ft. or 365 lbs. per acre.

ii. May 15 to May 31: apply granular fertilizer 21-0-0 ammonium sulphate at a rate of one-half pound actual nitrogen per 1,000 square feet. This rate is 2.4 lbs. per 1,000 per sq. ft. or 105 lbs. per acre.

iii. July 1 to July 15: apply granular fertilizer 32-0-0 ammonium nitrate at a rate of one-half pound actual nitrogen per 1,000 square feet. This rate is 1.6 lbs. per 1,000 sq. ft. or 68 lbs. per acre.

iv. September 1 to September 15: apply granular fertilizer 16-16-16 at a rate of one pound actual nitrogen per 1,000 square feet. This rate is 6.2 lbs. per 1,000 sq. ft. or 275 lbs. per acre.

6. Disease and Pest Control

a. All chemical controls must be applied by a licensed and qualified pest control applicator, following the procedures set forth in the labeling of the product, as required by law.

b. Healthy plants and lawns should be able to withstand minor disease and insect damage without controls. Routine application of pesticides shall not be practiced, as this destroys natural predator-prey relationships in the environment and non-target organisms.

i. Where unusually high infestations or infections occur, an accurate identification of the disease or insect shall be made and the control selected with care, prior to application.

ii. The Field Services representative shall be provided with the labeling for each pesticide used before the product is applied, including the Material Safety Data Sheet.

iii. Gophers shall be trapped or controlled with approved baits.

7. Grass/Weed Control in Desert Landscaped Areas

a. Pre-emergent Control

i. All areas dressed with decomposed granite shall be treated with pre-emergent herbicide twice yearly: in spring between February 15 and March 15, and in fall between August 15 and September 15. The pre-emergent must receive 0.5" of rain or be watered in within 10 days of application.

ii. Areas seeded with wildflowers **shall not** be treated with pre-emergent herbicide.

b. Post emergent Control

i. All areas shall be kept free of grass/weeds. Chemical and/or mechanical means may be used as appropriate. If grass/weed control is not performed, maintenance will be considered unsatisfactory.

ii. Before applying herbicides, the type of grass/weed shall be identified. The control will be selected using the most effective control for the species, the location and the season.

iii. Grass/weeds shall not be allowed to grow in paved areas such as driveways, walks, curbs, gutters, etc. Grass/weeds may be removed manually or sprayed with a herbicide. Dead grass\weeds shall be removed from the paved areas chemically edging around all obstructions.

8. Debris Removal

a. Litter and trash including leaves, rubbish, paper, bottles, cans, glass, rocks, gravel, and other debris shall be removed from all areas on a daily basis.

b. All refuse resulting from the maintenance operation of city properties shall be properly disposed.

c. Refuse containers are not to be used for off site generated materials.

9. Surfaces

a. All areas dressed with decomposed granite shall be raked as needed, but not less than once every four weeks.

b. All soil shall be regraded, as necessary, on a weekly basis.

c. Paved sidewalks, medians, bikepaths, and patio areas shall be swept or blown off with a power blower on a weekly basis.

10. Irrigation

a. Irrigation maintenance will be performed by Parks Sprinkler Maintenance personnel.

b. Parks maintenance personnel shall perform sprinkler checks/inspection after each mowing.

c. Parks maintenance personnel shall report all water leaks and/or system malfunctions to sprinkler maintenance personnel.

11. Replanting and Extra Work

a. Plant material which dies shall be replaced with a specimen of the same species and of equal or similar size as the plant lost.

12. Native Habitat Landscape Maintenance Specifications

a. The purpose of this site is to preserve native plant material, provide habitat for wildlife, act as a refuge and corridor to Papago Park, provide educational and interpretive opportunities for visitors, promote environmental stewardship through awareness and volunteer programs. Bi-annual volunteer clean-ups of the site will occur in April and October.

i. The natural understory and canopy of shrubs and trees is to be preserved as much as possible. In other words, do not trim, sheer, prune, or shape trees or shrubs. Ground cover should be left in tact, no mowing, edging or removal.

ii. There are only two exceptions to the above:
In the event that human habitat is created by transients cutting out shelters within tree or shrub structures, especially along the canal road. In this case, conservative trimming to remove branches that block view under the tree is acceptable. Do not remove all understory, but only enough to enable visibility under the tree/shrub.

In the event that a tree is diseased or heavily damaged from a storm and could be a liability. Cracked or broken branches should be cut back to the nearest crotch. Material that is not diseased should be mulched and left on site.

iii. **Do not use any** pesticide, herbicide, pre-emergent, or other chemicals in this site. Homeopathic (non-toxic, natural) remedies for diseased plants should be used sparingly to prevent blight of fungus from tree or cactus from spreading.

C. Circulation/Parking Plan

1. Background

a) Parking Supply and Demand

- Without plans for a mature park and developed commercial district, accurate parking needs cannot be determined.
- For planning purposes, staff used the average daily weekend draw of Kiwanis Park as a minimum for Rio Salado. Kiwanis Park draws approximately 10,000 visitors per non-event weekend. Rio Salado can be expected to draw a minimum of 5,000 daily non-event visitors. There are 850 parking spaces at Kiwanis Park.
- More accurate estimates will not be available until the lake is operational.
- Recognizing that a majority of Kiwanis Park users are not Tempe residents, the potential traffic/parking impact for Rio Salado can be expected to be great.
- Although the majority of park users will not be walking to the facilities, it is expected that 30% of the people will commute by transit to the area.
- Recognizing current parking issues in downtown and the proximity of Rio Salado to ASU, it can be expected that students will use parking provided for the park.

b) Managed Parking

One of the rationales for managed parking in the downtown area included the problems resultant from ASU students using free parking spaces all day. By managing parking at Rio Salado, staff assumes that user turnover is encouraged and non-lake users are discouraged.

c). **Transit**

The success of ASU parking lot 59 is partly due to the FLASH service provided between the lot and the campus. Staff assumed that providing similar high frequency shuttle service for users of Rio Salado in the designated remote parking areas in Rio Salado would also generate similar success. Also, staff assumed that headway and route improvements on the local bus service would promote the use of transit by lake and commercial users. This is supported by the study prepared by BRW, Inc. on behalf of Ciudad del Lago and the City, and will be verified during the Rio Salado sub-area study for the comprehensive Transportation Plan.

d). Development Cost

The average cost for constructing surface parking is between $1,500 and $2,500 per space depending on grading and site requirements. The average cost for constructing a parking structure is between $8,000 and $15,000 per space.

e). **Public Response**

Public comments taken over the last four years indicate circulation issues in Rio Salado are a critical concern.

2. Purpose and Objectives

The purpose of this document is to identify circulation and parking issues based on historic data, and outline phased objectives for obtaining optimum use of the Rio Salado without negative impact to Tempe citizens.

a) **Priority Objective:**

Prepare a comprehensive transportation study and sub-area plan as part of the city-wide Transportation Plan addressing city-wide circulation issues including local traffic issues and linkages to Rio Salado and the downtown area. The plan should develop programs and solutions focusing on transportation demand management (for private developments), transit use, parking management, and use of all transportation modes.

b). **Policy Objective:**

Based on the results of the comprehensive study, prioritization will need to be determined for funding transit and parking. Service to this area warrants a policy reflecting current philosophy. This includes how private developments are handled, and how neighborhoods are protected.

3. Day One

a) **North Bank**

a. Currently, there are 505 parking spaces at the north bank.
b. A total of 1,220 parking spaces could be developed on the north bank, providing relatively close parking to the lake:

- 95 of these are planned but not funded ($180,500)
- 620 of these are marina spaces that could be provided as overflow/event parking with minimal site preparation such as gravel cover and should only be improved after a plan final design for the area is approved.
- Site identification of this parking to be determined by the Rio Salado Park Master Plan. Development of the parking will be determined by the Transportation Plan.
- As currently practiced for overflow and events parking, additional remote parking could be provided through agreements with Arizona State University (Community Building on Curry), Salt River Project (PAB site on Mill and Van Buren), and the Arizona State Historical Museum (College and Curry).

b) **South Bank**

I. The Rio Beach location could accommodate a total of 3,230 cars as overflow parking with minimal improvements. Permanent parking spaces at the Rio Beach site should only be provided after long term parking demand for the Rio Salado area has been established.

II. A parking agreement between the City and ASU should be pursued immediately to provide additional 4,400 parking spaces (Lot 59) during peak lake use and off-peak for ASU (non-event and non-school days).

III. Event parking for 1,625 vehicles could occur on the water treatment plant site.

IV. Pursue a parking agreement with SRP to provide parking at Priest and Rio Salado Parkway.

Events

1. Parking to be planned with each event and arranged by promoter.
2. The following are the lots that are currently used for major events in the downtown or a major stadium event:
   a. ASU parking lots including ASU festival grounds (formerly NFL Experience site).
   b. Downtown parking lots.
   c. Rio Beach area (north of Rio Salado Pkwy, west of Hardy)
   d. Shuttles from remote lots. Possible lots – SRP, Phoenix Municipal Stadium.
   e. Park and ride lots served by transit.
3. All events on the lake will need to be coordinated with downtown and stadium events.

Long Range Plan

1. Alternative Transportation

a. Maximize transit, biking, and walking opportunities by providing incentives to users.

b. Encourage use of these modes to and within Rio Salado by providing closer drop off points to highly visited areas.

c. Bus, rail, bike, and boat services should be marketed and promoted together as an alternative to the automobile when visiting the lake.

2. Parking

a. A parking management plan with graduating fee and time restrictions should be implemented in existing and proposed lots near the lake.
b. Closer lots should have shorter maximum parking time allowed and higher fees.
c. Relaxed time restrictions and nominal or no parking fees should be offered at outlying parking lots.
d. Parking management strategy should allow passenger drop-off and pick-up zones at areas near the most popular attractions.
e. Parking management strategies should be re-evaluated as private developments and transportation improvements (e.g., rail) are built and adjusted in response to changing conditions.
f. Remote parking lots provide direct shuttle connection to Rio Salado destinations only to discourage parking by non-lake users.
g. Pursue parking partnerships with private entities: ASU, APS, SRP, and the AZ Historical Museum.
h. Parking for all private developments in the Rio Salado district should be required to provide 10% of their parking to the public

D. Signage Plan

This portion of the Rio Salado Management Plan addresses City signage on Town Lake and the Rio Salado Park, i.e., the land encompassed by the Rio Salado Park Master Plan. The area is bounded by Curry Road on the north, Rio Salado Parkway on the south, the Hohokam Freeway on the west, and McClintock Drive on the East.

1. Background

Two years ago a sign task force comprised of staff members from Rio Salado, Graphic Design, Planning, Sign Inspection, Public Arts, Facilities Maintenance, Traffic Operations, Public Relations, Risk Management, Police and Courts. Outside consultants and community representatives from the Rio Salado Commission met with staff to create a cohesive sign package. Conceptual design was approved by the City Council, Public Arts Commission, and Rio Salado Commission prior to construction documentation. Construction drawings were completed in the spring of 1998, and two prototype signs were constructed and installed on site. These signs are located on the corner of Rio Salado Parkway and Hardy Drive, and at the entry at Priest Drive and the Red Mountain Freeway. It is critical that the construction and installation of signs for the area be completed prior to the lake being filled.

2. Purpose and Objectives

The purpose of this document is to set design criteria for signage, identify sign locations, define sign types and quantities, describe construction and maintenance procedures, and outline an implementation schedule. Below are the objectives of this plan.

- Rio Salado should have a unique and cohesive look.
- Signage should be one of the artistic unifying links between development and park areas.
- Simple and effective design will incorporate specific colors conducive to both commercial and public areas.
- Consistency in graphics, materials and text are important.
- Signage should be flexible to change with time.
- Signage will have minimum text to communicate effectively, and use international symbols where possible.
- Minimize signs by grouping signs together at central locations.
- A conservative approach will be initiated for installation of signs, and additional signs will be phased in as needed.
- Developments are encouraged to use design elements in public signage in developments.
- Signage will comply with the Tempe sign ordinance.

3. Design

a) Concept

Drawing from the strong visuals that currently exist and incorporating images of what is to come, the signs are site inspired. Picking up the gold from the Mill Bridge at sunset, the red from Papago Buttes, the green of the mesquite trees, and the blue sky. Materials include weathered square steel poles, a rust patina ties to structures from the past, while the spun aluminum end cap incorporates the bike path lights and structures of the future. The strong vertical elements represent the important building components in Rio Salado, bridges, buildings, and boats. By incorporating the nautical influence of navigational flags, a system for communication can be extended from the waterway to the land, tying the park together. Simple circles, triangles and rectangles play off of one another to attract visitors to the information they need to enjoy the park.

b). Conceptual Design

Drawings are not to scale, text is not accurate, color is altered by copying process. These drawings are for overall look of signs, not to be used for construction. (See Exhibit A)

c). Colors

- Rio Salado Sky Blue - PMS 652
- Rio Salado Butte Red - PMS 180
- Rio Salado Sunset Gold - PMS 124
- Rio Salado Mesquite Green - PMS 575

4. Sign Locations

(See Exhibit B for approximate locations, each sign will be marked in the field prior to installation.)

5. Sign Types & Quantities

Sign quantities are estimates that are subject to change. Signs will be phased in according to necessity and funding.

A-2 -	banner brackets and permanent banner features	214	
A-3a -	**Vehicular Boat Facility identification**		**30**
A-3b -	Pedestrian Boat Facility identification		
A-4a -	Restroom Identification		
A-4b -	Restroom Identification		
B-1-	Major Park Entry Sign	23	
B-2a -	Trail Marker		9
B-3 -	Major Vehicular Directional		17
B-4 -	Medium Vehicular Directional		6
B-5 -	Minor Vehicular Directional		
C-1 -	Interpretive/interactive Park Kiosks		
C-2a -	Minor Interpretive Park		26
C-2b -	Minor Interpretive Park variation		
D-1 -	Changeable information kiosk		4
D-2 -	Informational		
E-1 -	Regulatory Traffic		146

6. Sign Specifications

(See Attachment C)

This next section identifies the need for signage at the time that the lake begins filling with water. The quantities listed are estimated counts of signs that will need to be bid out before the end of 1998.

1. Traffic Sign Panels		***Quantity***
36" diameter circle in Rio Salado blue to be mounted behind 30" dia. octagon stop signs.	8	
24" x 24" square in Rio Salado blue to be mounted behind 18" x 18" square no parking signs.	118	
30" x 36" rectangular in Rio Salado blue to be mounted behind 24" x 30" rectangular bike lane signs.		50
36" x 48" rectangle in Rio Salado blue to be mounted behind 30" x 36" rectangular turn signs.		18
36" x 36" square in Rio Salado blue mounted behind 30" x 30" bike regulation and warning signs.	24	
30" x 30" square in Rio Salado blue to be mounted behind 24" x 24" speed regulation signs.	10	
24" x 30" rectangle in Rio Salado blue to be mounted behind 18" x 24" chevrons.		6

2. Park Identification Circles and Trail Markers

Large red circles will be located on each major park sign throughout the park to identify areas of the park with descriptive names. This way-finding system will serve for meeting in the park, and will be accompanied by green trail marker signs with distances to and from park attractions.

Name on circle	***Trail marker***
	(distances hypothetical, not actual)
18" diameter red circle	24" x 36" green rectangle
1 north bank west end	priest drive 1 mi. / town lake west dam 1.5 mi. / loop road 2 mi./marina & boardwalk 3 mi.
2 south bank west end	priest drive 1 mi. / commercial recreation .75 mi. / town lake west

		dam 1.5 mi. / grove of cities 1.5 mi. / Tempe beach park 2 mi.
3	south bank priest west	commercial recreation .25 mi. / town lake west dam .5 mi. / grove of cities .5 mi. / Tempe beach park 1 mi. / hayden ferry 1.25 mi. / ciudad del lago 2 mi.
4	south bank priest east	commercial recreation .25 mi. / town lake west dam .5 mi. / grove of cities .5 mi. / Tempe beach park 1 mi. / hayden ferry 1.25 mi. / ciudad del lago 2 mi.
5	north bank priest west	town lake west dam .5 mi. / loop road 1 mi. / marina & boardwalk 2 mi. / Indian bend park 3 mi.
6	grove of cities	commercial recreation 1 mi. / town lake west dam .2 mi. / Tempe beach park .5 mi. / hayden ferry .6 mi. / ciudad del lago 1.5 mi. / asu 1.5 mi. /university drive .8 mi.
7	south bank west dam	commercial recreation 1 mi. / Tempe beach park .5 mi. / hayden ferry .6 mi. / ciudad del lago 1.5 mi./ asu 1.5 mi. / university drive .8 mi. /downtown Tempe .8 mi.
8	north bank railroad	west end dams .5 mi. / marina .5 mi./ lopiano bosque .3 .mi. / loma del rio .2 mi. / papago park .2 mi. / moeur park .2 mi. / boardwalk east & west 1 mi. / Indian bend park south 2 mi.
9	loop road west	west end dams .5 mi./ marina .5 mi./ lopiano bosque .3 mi. / loma del rio .2 mi. / papago park .2 mi. / moeur park .2 mi. / boardwalk east & west 1 mi. / Indian bend park south 2 mi./downtown Tempe .4 mi.
10	south bank railroad east	commercial recreation 1.4 mi.

		/ Tempe beach park .1 mi. / hayden ferry .2 mi. / ciudad del lago 1mi. / asu .8 mi. / university drive .8 mi. / downtown Tempe .4 mi.
11	south bank mill west	commercial recreation 2 mi./ west end dam .5 mi. / downtown Tempe .2 mi. / hayden ferry .1 mi. / ciudad del lago 1 mi./ asu 1 mi. / Indian bend park 1.5 mi. / boat beach .4 mi./aquatic center .8 mi.
12	south bank mill east	commercial recreation 2 mi. / west end dam .5 mi. / downtown Tempe .2 mi. / hayden ferry .1 mi. /ciudad del lago 1 mi. / asu 1 mi. / Indian bend park 1.5 mi. / boat beach .4 mi. /marina .8 mi.
13	north bank mill east	west end dams .5 mi. / marina .5 mi. / lopiano bosque .3 mi. / loma del rio .2 mi. / papago park .2 mi. / moeur park .2 mi. / boardwalk east & west 1 mi. / Indian bend park south 2 mi. / hayden ferry .4 mi. / Tempe beach park .4 mi. / downtown Tempe .4 mi.
14	loma del rio / lopiano bosque west	west end dams .5 mi. / marina .5 mi. / papago park .2 mi. / moeur park .2mi./ boardwalk east & west 1 mi. / Indian bend park south 2 mi.
15	loop road east / papago park	west end dams .75 mi. / marina .5 mi. / lopiano bosque .1 miles / loma del rio .1 mi. / papago park .1 mi. / moeur park .1 mi. / boardwalk east & west 1.2 mi. / Indian bend park south 2 mi.
16	lopiano bosque / papago park	west end dams .75 mi./

		marina .3 mi. / loma del rio .2 mi./ papago park .2 mi. / moeur park .2 mi. / boardwalk east & west .75 mi. / Indian bend park south 1.75 mi.
17	lopiano bosque / papago park	west end dams .75 mi. / marina .3 mi./ loma del rio .2 mi./ papago park .2 mi. / moeur park .2 mi. / boardwalk east & west .75 mi. / Indian bend park south 1.75 mi.
18	lopiano bosque east	west end dams 1 mi. / marina .2 mi. / loma del rio .7 mi. / papago park .2 mi. / moeur park .7 mi. / boardwalk east & west .2 mi. / Indian bend park south 1 mi. / east end dams 1 mi.
19	marina & aquatic center	west end dams .75 mi. / loma del rio .2 mi./ papago park .2 mi. / moeur park .2 m. / boardwalk east & west .75 mi. / Indian bend park south 1.75 mi.
20	south bank rural west	east end dams .75 mi./marina . 5 mi./ ciudad del lago .5 mi. / hayden ferry .75 mi./ downtown Tempe 1 mi. / asu . .25 mi./ Tempe beach park 1 mi. / grove of cities and towns 1.5 mi.
21	south bank rural entrance	east end dams .75 mi./marina .5 mi./ ciudad del lago .5 mi. / hayden ferry .75 mi./ downtown Tempe 1 mi. / asu . .25 mi./ Tempe beach park 1 mi. / grove of cities and towns 1.5 mi.
22	south bank rural east	east end dams .5 mi./marina .75 mi./ ciudad del lago .2 mi. / hayden ferry .1 mi./ downtown Tempe 1.2 mi. / asu . .25 mi./ Tempe

		beach park 1.2 mi. / grove of cities and towns 1.6 mi. papago park center 2 mi.
23	north bank boardwalk west	east end dams .75 mi./marina .25 mi./ ciudad del lago .7 mi. / hayden ferry .7 mi./ downtown Tempe 1.25 mi. / asu . .5 mi./ Tempe beach park 1 mi. / loop road 1 mi. / west end dams 1.5 mi.
24	north bank boardwalk east	east end dams . 5 mi./marina .3 mi./ ciudad del lago .6 mi. / hayden ferry .75 mi./ downtown Tempe 1.25 mi. / asu . .5 mi./ Tempe beach park 1.25 mi. / loop road 1 mi. / west end dams 1.5 mi.
25	Indian bend park	east end dams .25 mi./marina 1 mi./ ciudad del lago .7 mi. / hayden ferry 1 mi./ downtown Tempe 1. 5 mi. / asu . .75 mi./ Tempe beach park 1.5 mi. / loop road 2 mi. / west end dams 2.5 mi.
26	north bank McClintock west	east end dams .25 mi./marina 1.5 mi./ ciudad del lago .5 mi. / hayden ferry 2 mi./ downtown Tempe 2 mi. / asu . 1.25 mi./ Tempe beach park 2.25 mi. / loop road 2 mi. / west end dams 2.5 mi.
27	south bank McClintock west	east end dams .25 mi./marina 1.5 mi./ ciudad del lago .5 mi. / hayden ferry 2 mi./ downtown Tempe 2 mi. / asu . 1.25 mi./ Tempe beach park 2.25 mi. / loop road 2 mi. / west end dams 2.5 mi.
28	hayden ferry	east end dams 1 mi./marina .5 mi./ ciudad del lago 1 mi. / downtown Tempe .25 mi. / asu ..25 mi./ Tempe beach park .25 mi. / loop road 1 mi. / west end dams 1 mi.
29	ciudad del lago	east end dams .25 mi./marina

		1 mi./ downtown Tempe .25 mi. / asu .25 mi./ Tempe beach park 1mi./ loop road 1.25 mi. / west end dams 1.5 mi.
30	Tempe beach park	east end dams .5 mi./ ciudad del lago 1 mi. / downtown Tempe .25 mi. / asu 1 mi./ loop road .5 mi./ west end dams .5 mi.

3. Park Signs

Conceptually will be friendly welcoming signs with minimal regulatory language. Posted regulations will have standard language throughout, with additional special conditions posted where applicable. The Park Operations Plan determines the regulations. All major entries will post park regulations, a changeable kiosk posting the entire park ordinance will be located at high traffic areas.

4. On-the-lake Signs

Buoys, booms, and other water surface signs are covered in the lake use plan. Colors will primarily adhere to international boat safety colors, the Rio Salado colors may be used ancillary wherever possible. Signs on shore facing the lake are included in the park signs described in this document, but may address boat regulations etc.

5. Interpretive Signs

Quantities vary depending on topic. Subjects are listed on the locational map.

- **Airplane – identifying airplane shapes with those flying overhead**
- Animals – discussing sonoran desert animals
- Plant – discussing some element of plant life, riparian, bosque, non-native, flowering, trees, etc. depending on location.
- Dam – talking about different types of dams, focus on inflatable
- Hydrology – discussing dynamics of surface & underground water
- Park History – Tempe Beach Park
- Culture – identify major players in Tempe's history (Hohokam, Hispanic, Hayden, Harkins, etc.)
- Bridge History – discussion of the trilogy of bridges
- Industrial History – discussion of flour mill and Tempe industrial history
- Archeology – focus on Hohokam and the profession of archeology
- Boat – identify boat shapes with those using the lake
- Birds – discussion of sonoran desert birds
- Geology – identification of major rock features/types.
- Water – discussion of canals, use of water in the desert, conservation

- Art – identify key art features to look for in Rio Salado
- Habitat – discussion of habitat types and importance

G. Sign construction/maintenance

Initial sign construction will be bid to a sign contractor for mass production. A separate bid package will be issued for the installation of all park signs. Public Works may be responsible for small quantities of signs as the project progresses, and should plan to keep stock materials for Rio Salado signs in the sign shop. City of Tempe staff will be responsible for graffiti removal, damage control/repair, and text replacement. Large-scale modifications or additions will fall under the responsibility of the blanket contract with an outside contractor.

H. Schedule for First Year

10/5/98 Issue 2 separate request for quotations for construction and installation

10/29/98 RFQs due back to City of Tempe

11/12/98 Award contracts at council meeting for RFQs

11/16/98 (Week of) meet with contractors to review responsibilities & deadlines, order signs for production

2/10/99 First phase of signs completed and ready for installation

3/20/99 First phase of signs installed

4/10/99 Second phase of signs completed and ready for installation

5/10/99 Second phase of signs installed

7/10/99 Survey existing signs, review master plan and make list for third installation in fall.

8/10/99 Order third phase of signs for construction

10/10/99 Third phase of signs completed and ready for installation

11/10/99 Third phase of signs installed.

Exhibit A

Rio Salado
Conceptual Sign
Drawings

(Not to scale, color altered by copy process, not true text, text to be specified at time of construction)

Exhibit B

Rio Salado
Location Map

Exhibit C

Rio Salado
Sign Construction Drawings

(To scale, color specified, not true text, text to be specified at time of construction)